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Sperry, R. W. (1949) Reimplantation of eyes in fishes (*Bathgobius soporator*) with recovery vision. *Bio. Abs.*23(2), 2719.

26311. SPERRY, R. W. (U. Chicago.) Reimplantation of eyes in fishes (Bathygobius soporator) with recovery of vision. Proc. Soc. Exptl. Biol. and Med. 71(1): 80-81. 1949.--In contrast to earlier results with fishes, good visual recovery was obtained following excision and reimplantation of eyes in the marine teleost, Bathygobius soporator. A total of 22 animals were operated upon, 16 of which survived the 38-day postoperative observation period. Among these 16, 7 showed good recovery of visual feeding reactions beginning about the 27th day after operation. The accuracy with which those with vision were able to swim directly toward small pieces of bait indicated that the regenerated fibers had restored their central synaptic associations in an orderly manner. Postmortem microscopic examination revealed large regenerated optic nerves easily traceable into the optic lobes of the midbrain in the 7 that recovered vision and also in 2 additional cases in which visual feeding reactions had not yet appeared at the time of sacrifice.--R. W. Sperry.